

VII. LAKE WINNEBAGO WATERS REGION

BACKGROUND

LANDSCAPE SETTING

The Lake Winnebago Waters Region is located in the east-central part of the state and encompasses Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara and Winnebago Counties. Lake Winnebago, the largest lake in the state, is a major recreational resource within the region and includes within its larger system the smaller lakes of Butte des Morts, Winneconne, Poygan and the Fox and Wolf Rivers. Because Lake Winnebago exerts such a strong influence on the region as a whole, populations have tended to concentrate around its shores. Most cities within the region are in the Fox River Valley and include the urban areas of Appleton, Oshkosh, Kaukauna, Neenah and Menasha. Urban and suburban development within the region continues to grow and extend into previously undeveloped areas and public lands.

The southern half of this region is home to some of the world's best examples of continental glacial activity. At the end of the last glacier, the western portion of the region was covered by the Green Bay lobe. Today, drumlins, eskers, kettle lakes, kames, ground and end moraines, and other glacial features are evident throughout the area. In Green Lake County, there are numerous small kettle lakes in the glacial outwash, as well as the state's deepest natural lake—Green Lake at 236 feet—and one of the state's shallowest large lakes—Lake Puckaway with 5000 acres of 5-foot depth. There are a number of streams that flow southeasterly out of cold springs in the moraine. This cold spring area is largely forested, with large blocks of maple, birch, aspen, and hemlock dotting the landscape. The Menominee Indian Reservation also hosts some of the region's large intact forests. Towards the eastern end of the landscape, the topography is a combination of gently rolling hills interspersed with large flat wetlands.

LOCAL ECONOMY

The major land use in the Lake Winnebago Waters Region is agriculture, followed by forest land. The central portion of the region is characterized by soils that are mostly silt loams, but there are also areas of clay soils and sandy soils that support agricultural production. Most of the tillable land is intensively farmed, with dairying and cash-cropping of grains and vegetables being the predominant types of agriculture.

The Lake Winnebago Waters Region is characteristically rural, dotted with a few urban centers, namely the Fox River Valley. The top employment sectors include manufacturing, trade transportation and utilities, professional and business services, government, education and health services, and leisure and hospitality.

RECREATION USES AND PARTICIPATION

The unique Lake Winnebago Pool system provides for a water-based recreational hub in the region. Its proximity to urban centers further contributes to high recreational demand. With over 70 boat access sites on the Fox River System and Lake Winnebago, the most popular water-based recreational pursuits include boating of any type, swimming in lakes and streams, and freshwater fishing. In the southwestern portion of the landscape, some of the larger lakes provide the region's key fishing areas. Both Green Lake and Lake Puckaway are very productive and between them contain nearly all species of game fish and panfish found in Wisconsin. Lake Puckaway and Grand River Marsh provide excellent waterfowl hunting opportunities. Larger streams and rivers are used for canoeing and kayaking. Coldwater streams, such as the Mekan River and others also draw in anglers from throughout Wisconsin.

To the east, the Fox River remains a very popular boating and fishing location for residents along the Fox River Valley. To the west, the Wolf River Watershed is a popular recreation destination that has great potential for off-road biking, cross country skiing, nature study, horseback riding, fishing and hunting. Coldwater streams also draw in anglers from throughout Wisconsin.

In addition to lakes and streams, a variety of terrain and cover types accommodate a wide range of land based recreation activities. Historically, activities with the highest demand in the Lake Winnebago Waters Region compared to other regions include bicycling, primitive camping and horseback riding, among others. Another high demand activity is bird watching. In fact, High Cliff State Park is considered to offer some of the best birding within the state.

Recreation participation rates for Wisconsin residents as a whole were presented on page 5. Participation rates of Lake Winnebago Waters Region residents are largely consistent with the state average or within a few percentage points in variation. There are no notable differences from the state average.

EXISTING RECREATION SUPPLY IN THE LAKE WINNEBAGO WATERS REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Lake Winnebago Waters Region has approximately 158,913 of public land available for outdoor recreation. This total is the second least of all the regions, however, the presence of Lake Winnebago and the Fox River are significant resources in addition to the public lands. Along with the opportunities available in and around Lake Winnebago, a variety of terrain and cover types accommodates a diversity of recreational activities. This section briefly describes the public conservation and recreation lands in the Lake Winnebago Waters Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The US Fish and Wildlife Service manages just over 6,100 acres in the Lake Winnebago Waters Region. The properties are largely used for waterfowl production, forest production, wildlife habitat, outdoor recreation, water quality, fisheries habitat, etc.

b) State

The Department of Natural Resources owns just over 152,000 acres and holds public access easements on 2,216 acres in the Lake Winnebago Waters Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Hartman Creek and High Cliff State Park provide well-developed recreation settings with developed campgrounds, miles of trails, picnic areas, swim areas and boat launches. In addition, properties like the Northern Unit of the Kettle Moraine State Forest also contribute to the extensive trail network for hiking, horseback riding, biking, skiing, snowmobiling and other activities.

At the other end of the spectrum are properties like Hortonville Bog State Natural Area, lands specifically acquired to protect high-quality native plant communities and rare species. Although these types of properties can provide some limited recreation opportunities for low-impact activities such as hunting, bird watching and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

c) County

Most of these counties manage parks that provide campgrounds, boat launches and other types of infrastructure to support recreation. These facilities are tailored to the specific recreation assets that are found in their county. Waupaca County, for example, maintains accesses to canoeing opportunities on their scenic rivers as well as their selection of parks. Fond du Lac County manages 14 park facilities, including boat launches, and 6 trails totaling 50 miles.

d) Other

Many cities, villages and townships in the Lake Winnebago Waters Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their proximity to many citizens, they are typically well used although these properties tend to be small. Many of these parks also provide places for athletics and dog parks, in addition to some types of outdoor recreation offered on department properties.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs is mostly in Shawano and Waushara Counties, with the remaining acreage spread across the rest of the counties in the Lake Winnebago Waters Region. Approximately 8,000 acres in the region are currently enrolled in these programs. Because these programs use 25 or 50 year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire.

b) Land trusts

These land trusts operate in the Lake Winnebago Waters Region: Glacial Lakes Conservancy, Northeast Wisconsin Land Trust, Green Lake Conservancy, Ice Age Trail Alliance, The Prairie Enthusiasts, Madison Audubon Society, The Conservation Fund, and North Central Conservancy Trust. These non-profit conservation organizations have protected over 1,400 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

c) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping, and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. The 2014 funds are administered and provided by U.S. Department of Agriculture NRCS. To date, there are over 700 acres available in the region.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Lake Winnebago Waters Region. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the ten counties of the region.

The Lake Winnebago Waters Region contains the Lake Winnebago network, providing a wide-range of high-quality recreation opportunities. These properties provide a wide range of high-quality recreation opportunities. What follows are a few examples of infrastructure in the Lake Winnebago Waters Region that support a variety of recreation activities.

a) Hartman State Park:

- 108 campsites
- Picnic/day use areas
- Boat access site
- 300-foot beach and swimming area

b) High Cliff State Park

- 120 campsites
- Picnic/day use areas
- 4 boat launches
- A 40-foot observation tower

c) Navarino Wildlife Area

- Wildlife observation and photography
- Wild edibles/gathering
- Hiking
- Snowshoeing and cross-country skiing
- Deer, turkey and small game hunting
- Fishing – Wolf River
- Bicycling
- Snowmobiling trail

d) Mekan River Fishery Area

- Trout fishing
- Canoeing
- Gathering wild edibles
- Hiking
- Wildlife observation and photography
- Snowshoeing and cross-country skiing
- Deer, turkey, and small game hunting

e) State Rail-to-Trails

- Hiking, biking, in-line skating, horseback riding and snowmobiling opportunities
 - Eisenbahn State Trail
 - Friendship State Trail
 - Mascoutin Valley State Trail
 - Mountain-Bay State Trail
 - Newton Blackmour State Trail
 - Tomorrow River State Trail
 - Wild Goose State Trail
 - Wiouwash State Trail

f) State Wildlife, Fishery and Natural Areas

- Hunting, fishing and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

PUBLIC INPUT ON RECREATION NEEDS IN THE LAKE WINNEBAGO WATERS REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted four public open house meetings, in Eau Claire, Stevens Point, Onalaska, and Appleton between October 23 and November 1, 2017. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Lake Winnebago Waters Region.

In addition to these open houses, the department posted an online public input form to its web page. A downloadable version was also available for people who preferred to print, fill out, and send in the form. The public input period ran from October 6 to November 17, 2017. The department sent out information and press releases about the ROA

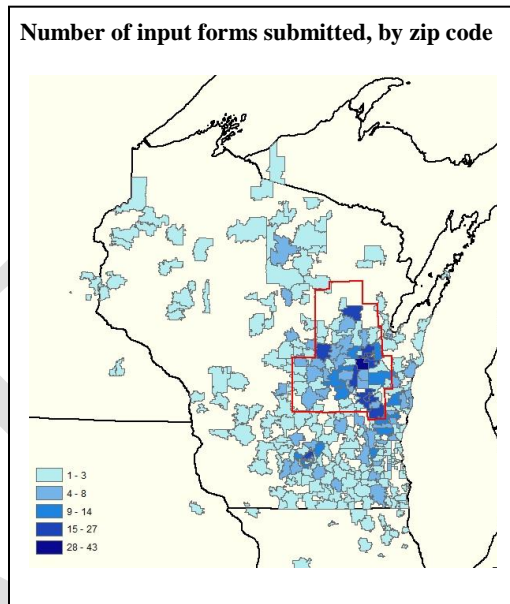
project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.¹

The department received comments in the following formats:

- 1,101 online public input forms
- 103 paper/email copies of the public input form
- 1 letter

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the “average” resident believes or the range of perspectives that exist.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map at right shows their distribution and frequency. Most respondents were from the greater Fox River Valley area, particularly the urban centers. There were also a fair number of respondents from the general southwestern part of the state, likely reflecting the interest in the Lake Winnebago area as well as the efforts of groups and organizations encouraging their members throughout the state and Midwest to complete the input form.



The Lake Winnebago Waters Region plays an important role in the state’s outdoor recreation system, especially fishing and other water-related activities. The department received comments, perspectives and ideas on other activities and issues. Trail-related activities continue to be an important consideration to experience and enjoy the outdoors.

Participation in outdoor recreation

Respondents to the public input opportunity participate in many outdoor recreation activities. Many of which can be done close to home. Popular activities that were selected by respondents are seen in the table at right. We can compare these results to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table on the next page were the most popular activities that the Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey indicated residents in the Lake Winnebago Waters Region participate in. As can be seen, the activities that respondents to the ROA input form participate in vary from the results of the random sample of Lake Winnebago Waters Region residents generated by the SCORP survey.

¹ The public input form was available for anyone to complete and about 1,200 forms were received. The department’s experience is that when it provides “open access” opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular, or active, interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people’s perspectives, reasoning and breadth of viewpoints. However, because there is no “defined population” from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the respondents compare to the population of the ten-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

Properties that people visit

Despite only a small portion of the property in the Lake Winnebago Waters Region, the most popular property is the Kettle Moraine State Forest Northern Unit. Over 60% of respondents indicated that they have visited the property in the last three years, most of these respondents participate in hiking, walking and running on trails. The next most popular activities within the Kettle Moraine North Forest include bicycling on surfaced trails and horseback riding. Folks who visit the property identified the quality of trails among the top three factors in determining favorite places to visit.

Although there are only two state parks, they are popular to the respondents to the questionnaire. High Cliff State Park and Hartman Creek State Park listed as the top third and fourth most visited properties in the region. Over 700 respondents have visited at least one state park, and 333 people who have visited both state parks in the Lake Winnebago Waters Region.

Other popular destinations include the Ice Age Trail, Fox River State Trail, Wild Goose State Trail, Wiouwash State Trail, and various local parks and forests in Winnebago, Waupaca and Fond du Lac counties.

Factors important in determining favorite places to visit

Of the people providing input, over 70% selected (1) the quality of trails as one of the top four most important factors in determining their favorite property to visit. The connections to trails continues to be a main driver for recreationists' experience. Besides the trails within properties, there are also several regional trails that connect communities. In decreasing order, the next three most important factors are: (2) the desire to be in a quiet place, (3) good maps, signs or information about the property, and (4) the quality of the habitat.

Among those who selected quality of the trail, over 50% of respondents participate in hiking, walking, and running on trails. Over a third indicated that they participated in bicycling on surfaced trails. These responses suggest that quality of trails is not only the most popular factor in determining favorite places to visit in the Lake Winnebago Waters Region. For those who selected quality of the trails, the majority participate in trail-related activities. This suggests a connection between the activities that individuals participate in and the factors that are important in determining favorite places to visit.

Similarly, of those who desire to be in a quiet place, most respondents indicate that they participate in hiking, walking, and running on trails. The majority of those who indicated a desire to be in a quiet place also visited the Ice Age Trail, Kettle Moraine State Forest Northern Unit and High Cliff State Park.

Additional outdoor recreation opportunities needed

Over 75% of respondents believe that more recreational opportunities are needed in the Lake Winnebago Waters Region. Of the additional opportunities desired by respondents, the top four choices selected were trail-related. Again, this speaks to the respondent's participation in a variety of trail activities. The opportunity that was most frequently selected as needed in the Lake Winnebago Waters Region was more trails for hiking, walking or running, which was selected by more than one quarter of respondents.

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities.

Popular recreation activities in which respondents to the ROA input form participate

ATV/UTV riding

Bicycling on surfaced roads

Camping – tent

Camping – RV/pop-up

Canoeing/kayaking

Cross-country skiing/ snowshoeing

Fishing – from a boat, canoe or kayak

Hiking, walking, running on trails

Horseback riding

Wildlife/bird watching

There is a similar correlation in results from ROA participants. Among horseback riders, the most commonly cited need was for more horse trails, selected by over 80% of respondents. The next highest need selected by 20% of horseback riders was for more developed campgrounds. Among ATV/UTV riders, there was also a similar correlation. Over 80% of ATV/UTV riders indicated a need for more trails for motorized recreation, with the next most popular need identified as more developed campgrounds only selected by 16% of those who ride ATV/UTV's.

The correlation is not as strong in other groups of participants, including those who bike on surfaced trails as well as canoe and kayakers. In both groups, the most cited need was for more hiking/walking/running trails, as indicated by almost 50% of cyclists and 45% of canoe and kayakers. The second most popular need identified for those who bike on surfaced trails was a need for more paved bicycling trails (38%).

Overall, the largest need indicated is for more hiking/walking/running trails (30%), followed by a need for more horse trails (25%), and more trails for motorized recreation (23%). Of those who identified a need for more hiking/walking/running trails, 90% participate in hiking, walking and running on trails, followed by 63% participation in bicycling on surfaced trails, and 59% participation in canoeing/kayaking. Key needs identified in the “other” category include four-wheel drive vehicle and horse-related (camping, trails, amenities) opportunities.

Department-managed roads and motorized access

Over 293 miles of department roads exist on department properties in the Lake Winnebago Waters Region. Generally, these roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities. About 24 miles of these roads are open to the public to drive “street-legal vehicles” (this includes cars, pick-up trucks, SUVs, motorcycles and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles and bicycles. Some local units of government in Marquette, Shawano and Waushara counties have authorized some types of motorized recreational vehicles on designated local roads.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to “street-legal” vehicles in the Lake Winnebago Waters Region to motorized recreation vehicles.²

Most participants shared their input regarding road closure and opening. Of these participants, 40% supported all roads on DNR properties remaining closed to motorized recreation, whereas 31% supported some roads on DNR properties remaining closed to motorized recreation, and 22% supported all roads on DNR properties being opened to motorized recreation vehicles year-round.

Of those that support all roads on DNR properties being opened to motorized recreation, 14% live in Winnebago county, 11% in Fond du Lac, and 10% in Outagamie. Most of these respondents indicate that they participate in

Top 10 most frequently identified recreation opportunities needed in the Lake Winnebago Waters Region, based on public input gathered during the ROA process

Activity	# of responses
More hiking/walking/running trails	351
More horse trails	304
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	278
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	195
More paved bicycling trails	188
More natural surface (dirt) bicycling trails	170
More public shore access to lakes & streams	170
More developed campgrounds (electric hook-ups, flush toilets, showers)	162
More local parks and playgrounds	98
More wildlife watching decks or platforms	91

² For purposes of the ROA, “recreational vehicles” includes off highway vehicles, ATVs, UTVs and off highway motorcycles.

ATV/UTV riding. The next most popular activities, of those who supported opening roads, are fishing from a boat, snowmobiling, and camping in an RV/pop-up.

Of those that support all roads on DNR properties remaining closed to motorized recreation, 19% live in Dane county, followed by 7% in Fond du Lac, and 6% in Outagamie and Winnebago counties. Most of these respondents indicate that they participate in hiking, walking, and running on trails. The next most popular activities, of those who support roads remaining closed, include canoeing/kayaking, cross-country skiing/snowshoeing and bicycling on surfaced trails.

Of those who indicated that some roads on DNR properties should be opened to motorized recreation vehicles for some purposes, 119 respondents support the opening of roads to provide access during the fall hunting season (September 1 to December 31). Of these respondents, most identified themselves as participating in horseback riding and hunting of big game (deer, bear). A few of respondents supporting opening roads for hunting participated in small game hunting, including turkey and waterfowl.

INPUT GATHERED AS PART OF THE WISCONSIN SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers and streams
- public shooting ranges
- local parks and playgrounds

There were no needs that respondents living in the ten counties in the Lake Winnebago Waters Region identified at a higher rate than the state average.

Lake Winnebago Waters Region residents identified the following activities, among others, less frequently than the state average:

- equestrian trails
- local parks and playgrounds
- public campsites
- public shore access to lakes, rivers streams
- trapping opportunities

FUTURE RECREATION NEEDS IN THE LAKE WINNEBAGO WATERS REGION

For the most part, existing opportunities in the Lake Winnebago Waters Region are water related activities that center mainly on Lake Winnebago and the Fox River system. However, the growing network of regional trails is becoming a staple for outdoor recreation, especially for local residents. Other types of outdoor recreation appear to be desired in the region, as indicated by the public input received for this study. Understandably, populations in the Fox River Valley will continue to seek out places where they can do their activities locally. Development of trails and park facilities as well as access to public lands and waters will continue to be a need as the population grows. Land use is more agricultural than forested which has translated into much less public lands being present than in regions to the north. This challenge will make it difficult when trying to locate properties and to develop trail or park infrastructure. Public recreation lands are typically in much smaller blocks, so the types of activities that can be accommodated are limited. Popularity of and demand for access to water-related recreation is expected to remain high in the region and should continue to be a strong consideration moving forward.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (October 6 to November 17, 2017).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Lake Winnebago Waters Region – High	Future recreation needs in the Lake Winnebago Waters Region - Medium	Future recreation needs in the Lake Winnebago Waters Region - Low
Bicycling – bicycling touring/road riding Bicycling – mountain biking/off-road biking Bird or wildlife watching Camping – developed Camping – primitive Canoeing or kayaking Cross country skiing Dog walking Fishing – lake fishing from a boat, canoe or kayak Fishing – lake fishing from shore or a pier Fishing – river fishing from a boat, canoe or kayak Fishing – stream or river fishing from shore or wading Hiking, walking, trail running, backpacking Hunting – big game Motorboating (waterski/tubing, personal watercraft) Nature photography Participating in nature-based education programs Picnicking Swimming in lakes and rivers Visiting a beach, beach walking	ATV/UTV riding Fishing – ice fishing Four-wheel vehicle driving Gather mushrooms, berries, etc. Horseback riding Hunting – migratory birds Hunting – small game Hunting – turkey Snowshoeing Target shooting - archery Target shooting - firearms	Bicycling – fat tire/snow biking Off-highway motorcycle riding Geocaching Snowmobiling Trapping Sailing, windsurfing, rowing, stand-up paddling Dog sledding/skijoring Dog training Dog trialing Scuba diving/snorkeling Whitewater rafting Horse cart driving Rock climbing

OPPORTUNITIES TO MEET FUTURE RECREATION NEEDS IN THE LAKE WINNEBAGO WATERS REGION ON DEPARTMENT-MANAGED LANDS

On behalf of Wisconsin residents, the department owns and manages properties in the Lake Winnebago Waters Region to meet a variety of ecological and recreation goals. These properties provide a range of settings and experiences – from developed sites with flush toilets and hot showers to remote places that provide wilderness settings. At some properties in the region, a variety of recreation opportunities is currently provided; at other properties, recreation plays a secondary role in their purpose.

Applying the regional needs listed above, the department evaluated the properties it manages in the Lake Winnebago Waters Coastal Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be “good fits” to provide different activities will be used to help focus the department’s work developing and updating property master plans. A description of opportunities to meet recreation needs in the Lake Winnebago Waters Region (on department-managed lands) follows.

NON-MOTORIZED TRAIL RECREATION

Non-motorized trail recreation has been and continues to be a significant outdoor activity throughout the year in the Lake Winnebago Waters Region. Several “rail-to-trail” corridors have been developed over the recent decades in partnership with county governments (see box to the right). From hiking and biking in the summer to cross-country skiing in the winter, the region’s residents and visitors take advantage of the numerous opportunities that currently exist.

An extensive trail system exists throughout the region, and provides a number of opportunities for bike touring as well as mountain and off-road biking. Bicycle touring would benefit from connecting existing networks, whereas mountain biking can expand opportunities through individual properties and pockets of trails.

Hiking, walking, and running on trails in the region remain very popular activities. Many opportunities currently exist on department properties throughout the region. Additional trails near population centers are likely to be most frequently used. Linking cities and villages to each other and to state and local parks will continue to create new experiences and increase economic activity in the area.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partner conducts planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential “good fits” in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Lake Winnebago Waters Region, cooperatively managed trails include:

- Eisenbahn State Trail
- Friendship State Trail
- Mascoutin Valley State Trail
- Mountain-Bay State Trail
- Newton Blackmour State Trail
- Tomorrow River State Trail
- Wild Goose State Trail
- Wiouwash State Trail

The following table lists current and potential future opportunities for non-motorized trail activities

Recreation Activity	Activity currently exists at the property; there are opportunities to expand this use	Activity currently exists at the property; there are only limited opportunities to expand this use	Activity currently does not exist at the property; there are opportunities to add this use	Activity currently does not exist at the property; there are only limited opportunities to add this use
Bicycling – bicycle touring/road riding	High Cliff State Park	Hartman Creek State Park Eldorado Wildlife Area	N/A	Glacial Habitat Restoration Area Navarino, White River Marsh, Grand River Marsh, Killsnake, Brillion and Germania Wildlife Areas White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas

Recreation Activity	Activity currently exists at the property; there are opportunities to expand this use	Activity currently exists at the property; there are only limited opportunities to expand this use	Activity currently does not exist at the property; there are opportunities to add this use	Activity currently does not exist at the property; there are only limited opportunities to add this use
Bicycling - mountain biking/off-road biking	N/A	High Cliff State Park Hartman Creek State Park	N/A	Glacial Habitat Restoration Area Killsnake, Eldorado, Brillion, Poygan Marsh, Wolf River Bottoms, Deer Creek and Greenwood Wildlife Areas White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas
Cross country skiing	Navarino Wildlife Area	White River Marsh, Grand River Marsh, Poygan Marsh, Germania, Greenwood and Mukwa Wildlife Areas White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas Hartman Creek and High Cliff State Parks	Rat River, Wolf River Bottoms, Mack and Deer Creek Wildlife Areas Lower Wolf River Bottomlands Resource Area	Glacial Habitat Restoration Area Eldorado and Wolf River Wildlife Areas
Hiking, walking, trail running, backpacking	<p>All department properties are open to hiking, although many fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add trails designated for hiking. The properties listed below were found to have quality opportunities to add more hiking, walking, trail running, and backpacking:</p> <p>Grand River Marsh Wildlife Area Navarino Wildlife Area White River Marsh Wildlife Area</p>			
Dog walking	<p>Dog walking has similar characteristic as hiking. Dogs must be leashed on department properties except where the hunting season allows for using dogs. Nearly all department properties have opportunities to add trails designated for hiking. Properties closer to urban areas may provide better access to more people searching for dog walking opportunities.</p>			

WATER RELATED RECREATION

There is considerable demand for water related recreation in the Lake Winnebago Waters Region, including fishing, swimming and using a variety of watercraft.

Lake Winnebago is popular for boating and fishing year-round, as are the flowages on the Fox River. There is also an abundance of tributary streams in the region to fish or to simply enjoy a day on the water. Lake Winnebago itself features 20 boat landings and has abundant populations of panfish, walleye, sturgeon and catfish. Although there are many existing boat launches that accommodate trailers with motorboats as well as carry-in access for canoes and kayaks, there are opportunities for additional access sites on underserved waterways on department properties to help meet regional demand.

The following table lists current and potential future opportunities for water related recreation.

Recreation Activity	
Canoeing or kayaking	<p>Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. The following properties may have the potential to add more or better develop walk-in trails to access waterbodies with canoes or kayaks:</p> <ul style="list-style-type: none"> Brillion Wildlife Area Eldorado Wildlife Area Killsnake Wildlife Area Navarino Wildlife Area Rat River Wildlife Area Rush Lake Glacial Habitat Restoration Area Wolf River Wildlife Area
Fishing - lake fishing from a boat, canoe, or kayak	<p>The department currently maintains improved boat launches throughout the region. Many department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. There are a few department properties that would be able to help address this recreation activity. Other public land management agencies may be able to provide additional access as well. The following properties may have potential to add more improved boat access sites (ramps for trailered boats):</p> <ul style="list-style-type: none"> Asylum Bay Rough Fish Station Calumet Harbor Rough Fish Station Fox River – Eureka Locks Remnant Fishery Area Rush Lake Glacial Habitat Restoration Area Waukau Carp Ponds and Creek
Fishing - river fishing from a boat, canoe, or kayak	<p>The department currently maintains improved boat launches throughout the region. Department properties connecting to rivers either already have boat accesses or have no feasible way to create more. As such, there are few department properties that would be able to address this recreation activity. Other public land management agencies may be able to provide additional access. The following properties may have potential to add more improved boat access sites:</p> <ul style="list-style-type: none"> Eldorado Wildlife Area Fox River-Eureka Locks Germania Wildlife Area Grand River Marsh Wildlife Area Navarino Wildlife Area White River Marsh Wildlife Area

Recreation Activity	
Fishing - lake fishing from shore or a pier	<p>All department lands with lakes are open to shore fishing and as such there are not significant opportunities to expand this opportunity. There are some fishing docks or piers on department lands and there are some opportunities to add new ones, particularly at those properties near cities and villages and with easy road access. The following properties may be able to improve opportunities:</p> <p>Germania Wildlife Area Grand River Marsh Wildlife Area</p>
Fishing - stream or river fishing from shore or wading	<p>All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels or to create disabled accessible fishing areas on the following properties:</p> <p>Eldorado Wildlife Area Germania Wildlife Area Grand River Marsh Wildlife Area Lower Wolf River Bottomlands Navarino Wildlife Area White River Marsh Wildlife Area Wolf River Wildlife Area</p>
Motorboating (waterski/tubing, personal watercraft)	<p>The department currently maintains improved boat launches throughout the region. Some department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. There are a few department properties that would be able to address this recreation activity. Other public land managers may be able to provide additional access.</p> <p>Asylum Bay Rough Fish Station Calumet Harbor Rough Fish Station Fox River-Eureka Locks Germania Wildlife Area Grand River Marsh Wildlife Area White River Marsh Wildlife Area</p>
Swimming in lakes and rivers	<p>All department properties adjacent to public waters allow swimming. Many state parks and forests have beaches, changing rooms and other amenities to accommodate swimming. Because most department properties in the region have limited sites for these amenities, there are no other properties that would be able to create or expand existing swimming opportunities.</p>
Visiting a beach, beach walking	<p>All department properties adjacent to public waters allow access to the water, however, there may not be a designated beach area. State parks typically have beaches to accommodate demand for swimming. The following department properties may be able to either add new opportunities or expand existing opportunities for visiting a beach:</p> <p>High Cliff State Park</p>

OTHER FORMS OF RECREATION

There is demand for more of the other types of outdoor recreation in the Lake Winnebago Waters Region, including camping, wildlife viewing and picnicking.

Bordering Lake Winnebago are properties such as High Cliff State Park, which provides several camping opportunities that include family campgrounds, outdoor group campsites, and an accessible cabin. Picnic areas, playgrounds, and a volleyball court are also available.

There remains opportunity for additional access sites on department properties to expand opportunities for visitors to enjoy the region's natural landscape. The following table lists current and potential future opportunities for other forms of recreation.

Recreation Activity	Activity currently exists at the property; there are opportunities to expand this use	Activity currently exists at the property; there are only limited opportunities to expand this use	Activity currently does not exist at the property; there are opportunities to add this use	Activity currently does not exist at the property; there are only limited opportunities to add this use
Camping – developed	Hartman Creek State Park High Cliff State Park	N/A	N/A	Glacial Habitat Restoration Area Killsnake, Eldorado, Brillion, Rat River, Wolf River Bottoms, Wolf River, Mack and Deer Creek Wildlife Areas White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas Lower Wolf River Bottomlands Natural Resource Area
Camping – primitive	N/A	High Cliff State Park	Hartman Creek State Park	Navarino, Wolf River Bottoms, Mack, Wolf River, Deer Creek, Killsnake, Eldorado, Brillion and Rat River Wildlife Areas Glacial Habitat Restoration Area White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas Lower Wolf River Bottomlands Natural Resource Area
Participating in nature-based education programs	Most department properties are well positioned to be used for nature-based education programs. Some schools use these outdoor classrooms to give students “hands-on” experiences with the outdoors. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. The following department properties may have potential to add access to make nature-based education programs more successful: Asylum Bay Rough Fish Station Hartman Creek State Park High Cliff State Park Lower Wolf River Bottoms Wildlife Area Navarino Wildlife Area State Ice Age Trail Areas Waukau Carp Ponds and Creek Wild Rose Hatchery			

Recreation Activity	
Picnicking	<p>Many department properties have areas designated for picnicking, especially state parks and trails. The following properties may be well suited to develop or expand these areas:</p> <p>Asylum Bay Rough Fish Station</p> <p>Extensive Wildlife Habitat (Fond Du Lac, Green Lake, Waushara, Winnebago counties)</p> <p>Fox River-Eureka Locks</p> <p>High Cliff State Park</p> <p>State Ice Age Trail Areas</p> <p>Waukau Carp Ponds and Creek</p>
Bird or wildlife watching	<p>All department properties are open to bird and wildlife watching. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. Nearly all department properties have opportunities to add at least some designated hiking trails or viewing platforms that would aide this activity.</p>
Nature photography	<p>All department properties are open to nature photography. Depending upon if the target is a landscape view or a rare butterfly perched on a blade of grass, some properties may be preferred over others. Viewing platforms may assist some photography and provide better vantage points from which to capture images of wildlife.</p>
Hunting – big game	<p>Nearly all department properties are open to big game hunting for at least some part of the season. State parks and trails have special regulations pertaining to when and where hunting is allowed on the property. Hunter walking trails are sometimes desired to reach different parts of the property, so adding trails could provide better opportunity for some hunters. In some cases, properties may be able to add parking to improve access for hunters,</p>

SUMMARY OF THE LAKE WINNEBAGO WATERS REGION ROA

The combination of the Lake Winnebago system with a growing urban population creates a recipe for growing recreational demand in the region. Water-related activities are plentiful, and simultaneously areas for potential growth. Fishing from lakes and rivers, along with canoeing and kayaking, were noted as key opportunities with potential to expand within the Lake Winnebago Waters Region.

Camping, both primitive and modern, as well as hiking on trails are both also in-demand activities in the region. Even with smaller blocks of public land compared to regions further north, there remain regional opportunities to accommodate these activities. Among survey participants, the emphasis on non-motorized recreation is further demonstrated in strong participant responses for keeping all roads on DNR properties closed to motorized recreation.

In general, the department believes the following areas provide additional opportunities for the growth of recreation opportunities in the Lake Winnebago Waters Region:

STATE PARKS

- Surfaced bicycle trails that expand the existing network linking cities, villages and campgrounds.
- Developed camping, including adding electrified sites to some campgrounds or significant portions of campgrounds.
- Primitive camping to accommodate calmer, more primitive experiences.
- Developed hiking trails and wildlife viewing platforms.

STATE WILDLIFE AND FISHERY AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Walk-in trails to expand access to waterbodies with canoes or kayaks.
- Developed boat access sites to provide access to Lake Winnebago and its surrounding waters.
- Fishing docks and access sites to increase opportunities for fishers on streams, rivers and lakes.
- Cross-country skiing trails to support a network of trails for ambitious winter recreators.
- Developed picnic areas near parking areas.